
Service Versus Systems for Small Organisations in Europe





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SERVICE VERSUS SYSTEMS
FOR
SMALL ORGANISATIONS IN EUROPE

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SERVICE VERSUS SYSTEMS
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ABSTRACT

Many small organisations have already moved their computer processing in-house. The exceptions to this are payroll and specialised vertical applications where many benefits from using the service approach still apply. Service vendors must be alert to the new opportunities being opened up in this area of the market for hybrid 'on-line' batch services for small organisations.

This report analyses the changing demands of this market. The role of the PC in the development of on-line batch processing is examined as is the expected rate of migration to these new services. Recommendations for product and marketing initiatives to be made by vendors are included.

This report contains 58 pages, including 24 exhibits.

**SERVICE VERSUS SYSTEMS
FOR
SMALL ORGANISATIONS IN EUROPE**

CONTENTS

	<u>Page</u>
I INTRODUCTION.....	1
A. Purpose	1
B. Scope and Use	1
C. Methodology	2
II EXECUTIVE SUMMARY	5
A. Small Firms Are Moving Most Operations In-House	6
B. Payroll Is Least Likely to Be Done In-House	8
C. The Changing World of Batch Delivery	10
D. Approaches to the Changing World	12
E. Recommendations	14
III MARKET ANALYSIS AND TRENDS	17
A. Present Market Status	17
B. Market Changes in the Next Five Years	19
C. Major Trends	21
D. Survey Analysis	22
IV ANALYSIS OF KEY APPLICATIONS.....	39
A. Applications Key to Very Small Companies	39
B. Applications Key to Small Companies	39
C. Key Applications	40
V THE MICRO THREAT TO BATCH SERVICE VENDORS	43
A. Expected Annual Change	43
B. Likely Replacement Systems	44
C. Replacement Systems Costs	45
D. The ADP Approach	45
VI FUTURE APPROACHES FOR BATCH SERVICE VENDORS	49
A. Software	49
B. On-Line PCs	49
C. Integrated Systems	50
VII CONCLUSIONS AND RECOMMENDATIONS	51
A. Market Direction and Change	51
B. Comparative Approaches	52
C. Recommendations	53

	<u>Page</u>
APPENDIX A: FIVE-YEAR FORECAST, 1985-1990	55
APPENDIX B: QUESTIONNAIRE	57

**SERVICE VERSUS SYSTEMS
FOR
SMALL ORGANISATIONS IN EUROPE**

EXHIBITS

		<u>Page</u>
I	-1 Survey Response by Country Market	3
II	-1 Small Firms Are Moving Operations In-House	7
	-2 Payroll Least Likely to Be Done In-House	9
	-3 The Changing World of Batch Delivery	11
	-4 Approaches to the Changing World	13
	-5 Recommendations	15
III	-1 Years of Prior Use of Outside Service	18
	-2 Average Monthly Expenditure for Outside Service	20
	-3 Average Number of Employees in Companies Surveyed	23
	-4 Application Use as a Percent of Total Use of Outside Service (20 or More Employees)	24
	-5 Application Use as a Percent of Total Use of Outside Service (Fewer than 20 Employees)	25
	-6 Expected Increase in the Use of Outside Service Annually for Next Five Years	26
	-7 Estimated Industry Growth Rate for Pure Batch Services	27
	-8 Percent of Companies Expecting to Purchase/Lease In-House Systems	29
	-9 When Will Companies That Expect to Purchase/Lease In-House Systems Do So?	30
	-10 Type of System to Be Chosen When Service Users Purchase/Lease In-House Systems	31
	-11 What Will Be the Average Purchase Price for New In-House Systems (Whether Purchased or Leased)?	32
	-12 Percent of Computer Buyers Who Intend to Convert Payroll to New System	34
	-13 Percent of Service Users Who Would Use Present Methods If Offered on In-House System	35
	-14 Percent of Future Computer Buyers Who Would Use Present Methods If Offered on In-House System	36
	-15 Reasons That Service Users Began Using Service When First Initiated	37
IV	-1 Ranking of Key Applications on Outside Batch Service	41

	<u>Page</u>
A -1 Five-Year Forecast, 1985-1990--Information Services for Small Organisations	55
-2 Currency Conversion Rate Assumptions	56

I INTRODUCTION

A. PURPOSE

- The world of batch service providers has changed dramatically over the past few years and traditional providers must position themselves for new markets and delivery concepts for continued growth.
- This report and research was instituted to ascertain the depth and breadth of these changes and to determine the extent to which (and the methods whereby) service vendors and others can maximise existing opportunities.

B. SCOPE AND USE

- The report details findings concerning establishments with 500 or fewer employees and the use of traditional batch services.
- The report should be used by information service providers in all delivery modes as an adjunct to their own strategies when viewing this market.
- Batch service providers should review the findings carefully before implementing new policies and strategies for the next five years.

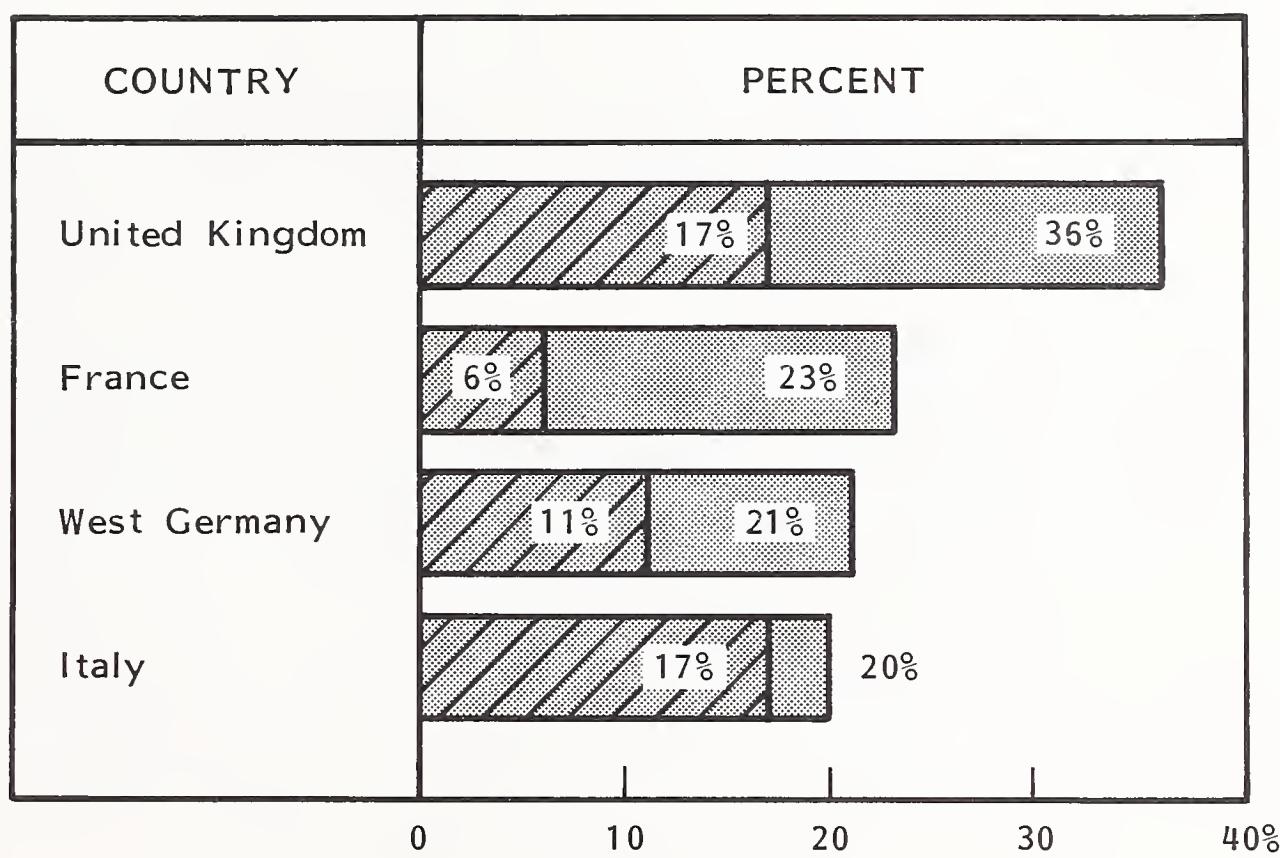
- In using the report, the reader should bear in mind that the term 'very small company' refers to establishments with fewer than 20 employees. When a distinction is being made for comparative purposes, 'small company' refers to firms with 20 or more employees, but fewer than 500. When no distinction is obvious, 'small company' refers to the entire group of establishments with fewer than 500 employees.
- The terms 'microcomputer' and 'PC' are used interchangeably and are considered synonymous.

C. METHODOLOGY

- Primary research was conducted into this subject area in the four major European markets of France, Italy, the United Kingdom, and West Germany.
- Interviews were held with small-business users to ascertain their perspectives on service offerings.
- Seventy establishments of 500 or fewer employees were contacted by phone using the questionnaire shown in Appendix B. Thirty-six of these were service users. Exhibit I-I shows the country breakdown between the service and non-service response.
- In addition, the results of research carried out on this topic in the U.S. were also reviewed.

EXHIBIT I-1

SURVEY RESPONSE BY COUNTRY MARKET



- Service Users
- All Respondents

II EXECUTIVE SUMMARY

- This executive summary was designed to give the reader a synopsis of the salient points of the report. Readers are urged to study the entire report prior to arriving at strategic conclusions.
- In order to assist the reader in presenting this report to others, presentation material is provided on each text page of the executive summary that highlights the material on the facing exhibit. The presentation leader is encouraged to use other exhibits in the report to supplement this material.

A. SMALL FIRMS ARE MOVING MOST OPERATIONS IN-HOUSE

- Many small organisations have already moved their operations in-house, with the exception of payroll and specialised vertical applications, and are no longer using service bureaus for basic accounting applications such as billing, inventory control, accounts receivable, sales analysis, and general ledger.
- The survey indicates that 42% of all companies intend to purchase computers over the next one to five years but that they do not necessarily intend to move in-house the applications provided by the service vendor.
- The average time before the expected move to an in-house computer is two years.
- Batch service organisations have been changing their service to provide customers more on-line capability, resulting in reasonable success in retaining some business that might otherwise migrate to in-house minis or PCs.

SMALL FIRMS ARE MOVING OPERATIONS IN-HOUSE

- **Many Small Firms Are Already Using PCs
for Accounting**
- **42% of Firms Will Purchase Computers in
Approximately Two Years**
- **Batch Service Firms Are Modifying Delivery
Methods to Help Slow In-House Migration**

B. PAYROLL IS LEAST LIKELY TO BE DONE IN-HOUSE

- Over 70% of all service respondents planning to buy or lease an in-house system wish to continue to run payroll through a service bureau.
- This would strongly support arguments that service companies should find ways to offer software, hardware, integrated systems, etc., to their maturing customers--especially when viewed in the light of the increased expenditures expected by the buyers of in-house systems.
- The overwhelming lead of payroll suggests the position of this application as more 'solid' for the batch vendor but also suggests the already serious erosion of the accounting functions as they continue to migrate to in-house operation.
- Forty-two percent of the respondent companies intend to purchase computers over the next five years, but they do not intend to move all services in-house. This indicates that the respondents were generally pleased with their services but still felt a need to purchase computers.

INPUT®

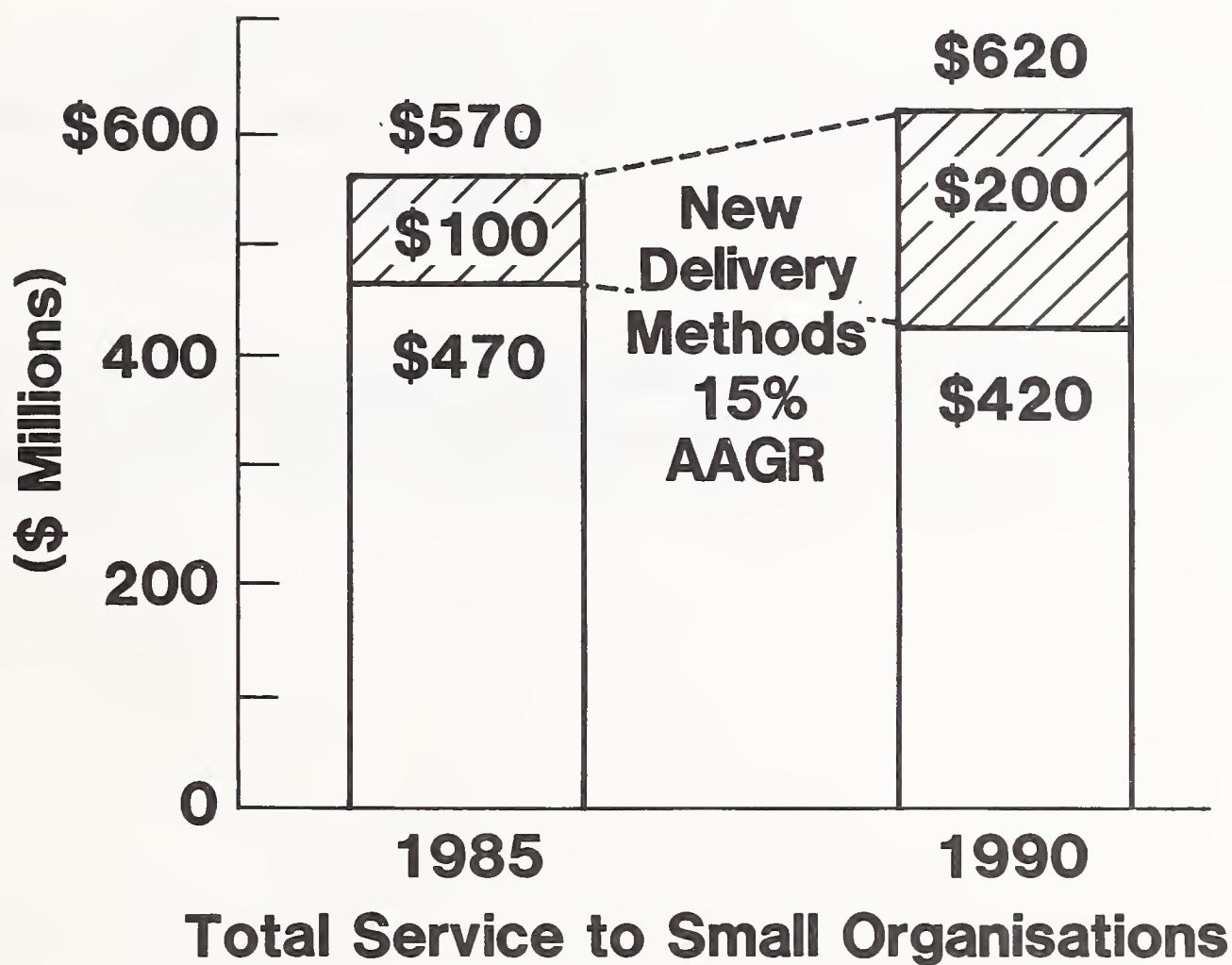
PAYROLL LEAST LIKELY TO BE DONE IN-HOUSE

- **Over 70% of Companies Developing In-House Systems Would Continue with Batch Payroll Service**
 - **Companies Like the Service They Get But Find the Lure of Computer Ownership Irresistible**
-

C. THE CHANGING WORLD OF BATCH DELIVERY

- The total small business market for batch services is expected to decrease by an estimated 2.1% per year in current dollars (not adjusted for inflation).
- This erosion is not likely to get worse in the near future, so batch service vendors will have time to react.
- Some batch business will change from pure batch to on-line batch utilising PCs or terminals in user facilities and frequently utilising the same supplier, when the batch vendors upgrade their systems to provide this additional capability.
- Many service bureaus have for years provided methods by which batch customers could go on-line to large processors, thus satisfying some of the requirements of going in-house by providing terminals on the customer site.
- Batch services are migrating to new delivery methods but are still in a service mode such as remote batch or on-line conversational batch. These new delivery methods are forecast to grow at an AAGR of 15% in Western Europe.

THE CHANGING WORLD OF BATCH DELIVERY (France, Italy, United Kingdom and West Germany)



D. APPROACHES TO THE CHANGING WORLD

- The study clearly shows that, with a few exceptions, the traditional batch service world has changed significantly within the past three years, with most small firms having moved at least some processing in-house.
- Payroll continues as a strong service market with some general accounting still being available to service users.
- It would now be rare to find an organisation--one that has more than 20 employees--not using some form of computer, usually justified by a specialised industry-specific use such as numerical control or by bread-and-butter applications such as accounts receivable.
- An estimated 17% of batch business has migrated from pure batch to a combination of a terminal or micro on-line to mainframe, usually with the same service supplier. This segment will grow at an estimated annual rate of 15%.

INPUT®

APPROACHES TO THE CHANGING WORLD

- **An Estimated 17% of Former Batch Business is Now Provided On-Line by Same Supplier**
- **This Newer “Hybrid” Method Will Grow at Least 15% Per Year**

E. RECOMMENDATIONS

- The most practical approach to the changing market scenario is to combine the existing service offering with some method of on-line operation.
- The service vendor should mount an aggressive campaign with existing customers, emphasising the positive aspects of service and reinforcing the reasons for selecting the service to begin with (i.e., saving time, saving effort, saving money).
- The service alternative to data processing continues as a viable method of delivery within a narrowing envelope of clients. However, with the appropriate strategy and attendant investment for the future, outside services for data processing solutions by batch vendors can continue to be a growth business.

RECOMMENDATIONS

- **Service is Still a Strong, Viable Concept**
 - **Vendors Must Modify Offerings to Satisfy Unfulfilled Urges to Be On-Line**
 - **The Envelope is Narrowing, But the Business Remains Strong**
-

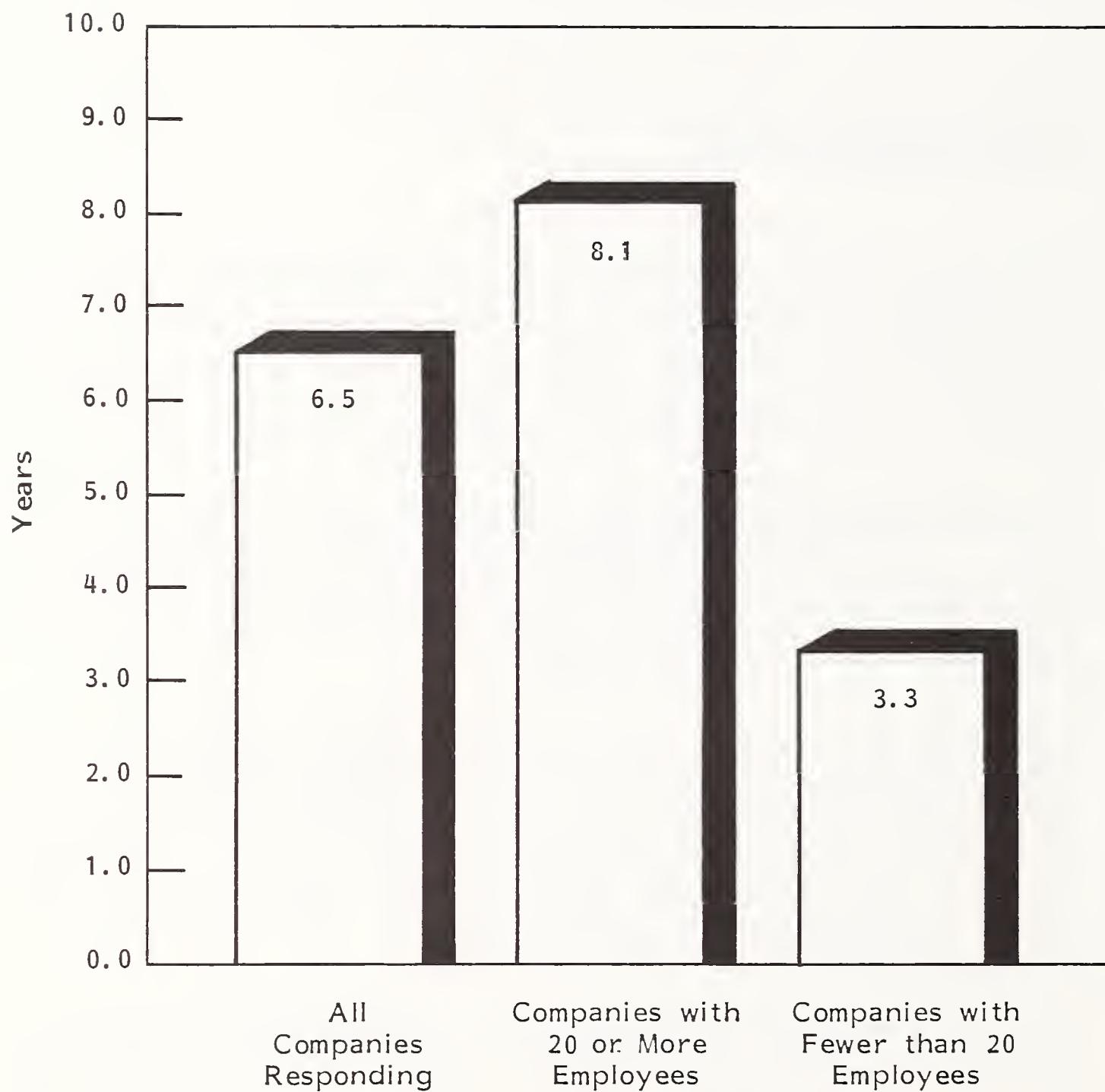
III MARKET ANALYSIS AND TRENDS

A. PRESENT MARKET STATUS

- The revenues of service bureaus have been adversely affected as organisations have moved their operations in-house. The wide availability of PCs has particularly affected service bureau revenues from small organisations. Payroll and specialised applications are exceptions to this general trend.
- Very small organisations (less than five people) may be exceptions to this where they use accountants' bookkeeping services that are, in effect, service bureaus based on small computers. These establishments tend not to consider themselves as users of computer services.
- Other exceptions might be the processing of highly specialised or rather narrow applications requiring labour for data collection or preparation, or other ancillary functions not easily accommodated on a PC. In other cases the bureau might offer special knowledge not easily computerised on a PC; for example, processing for a small building society.
- Exhibit III-1 shows that the average user of computer service, amongst the respondent group, has been using the service for about six-and-one-half years. This and subsequent findings tend to indicate that what remains as outside service may be more stable business than was the case prior to the PC explosion.

EXHIBIT III-1

YEARS OF PRIOR USE OF OUTSIDE SERVICE



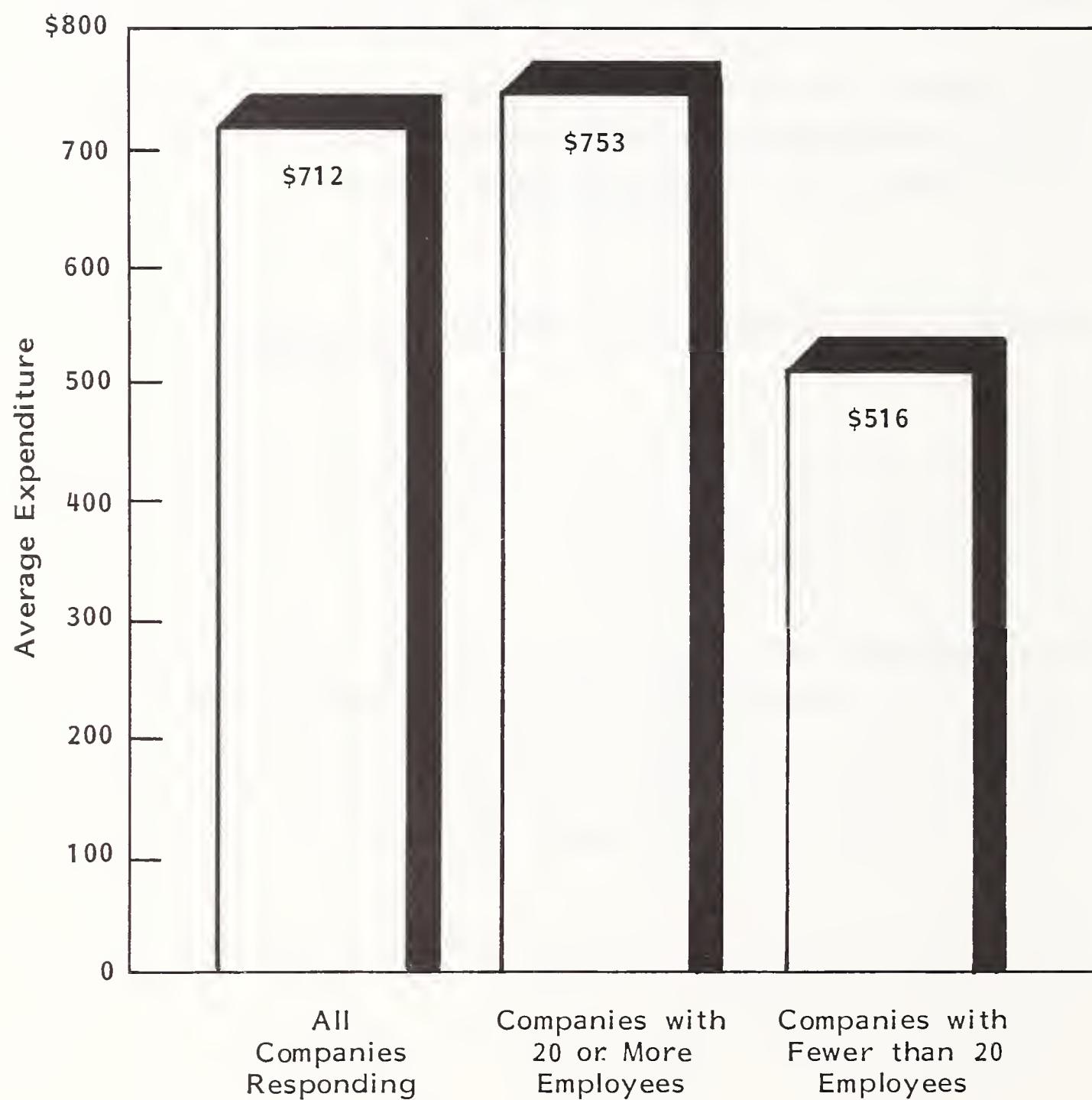
- Exhibit III-2 indicates that slightly more than \$700 per month is spent on outside service by small organisations. The results show that organisations with fewer than 20 employees spend approximately \$37 per month per employee on service (based on an average of 14 employees per company). Companies with more than 20 employees spend about \$4.1 per month per employee for service (based on an average of 182 employees per company).
- This difference can be explained to some degree through economies of scale, but it also indicates a much stronger need for services in the smaller company not yet able to justify the cost of a dedicated system.

B. MARKET CHANGES IN THE NEXT FIVE YEARS

- The survey indicates that 42% of all companies intend to purchase computers over the next one to five years but that they do not necessarily intend to move all service applications in-house.
- The average time a company takes to move to an in-house computer is two years. Smaller companies migrate slightly faster than those companies having 20 or more employees, probably because the smaller companies can utilise a simple operation on a PC easier than the larger firms can. These factors were fairly homogeneous across the different European country markets surveyed.
- The majority of the firms interviewed, if they intend to go in-house, were buying for the first time.

EXHIBIT III-2

AVERAGE MONTHLY EXPENDITURE FOR OUTSIDE SERVICE



C. MAJOR TRENDS

- Almost all companies are now reviewing their computer needs in the light of available technology and the present advertising pressures in the general media.
- All suppliers seem to be emphasising the more spectacular uses for their systems and almost ignoring the day-to-day applications--probably because the advertising agencies find it easier to be more creative about production control applications than to find something to say about general ledger or payroll.
- The system suppliers are not ignoring the requirement to have a full line of business packages available on their systems. But they usually leave software to third parties, offering the software as options to be decided upon at the point of purchase or bundled as a sales inducement.
- Many of the smaller (PC) systems sold to small businesses are obtained through retail computer outlets, with the attendant lack of support and knowledge of the buyer's real requirements as well as after-sales interest in the buyer's problems.
- This will be a continuing problem. However, competitive pressure will eventually force the suppliers to find ways to eliminate the problems that buyers encounter.
- This means an opportunity for the service industry to counter with alternatives that make the transition to in-house more effective for the user and more profitable for the service companies.
- Batch service organisations have been changing their service to provide customers with more on-line capability, resulting in reasonable success in

retaining some business that might otherwise migrate to in-house minis or PCs.

D. SURVEY ANALYSIS

- The survey carried out for this study was aimed at small companies. Firms that were known to have more than 500 employees were not contacted.
- Seventy-nine percent of the companies responding had 20 or more employees. The remaining 21% had fewer than 20 employees. The average number of employees at the companies surveyed is shown in Exhibit III-3.
- Fifty-one percent of the total number of respondents used some form of outside service.
- The average expenditure was \$712 per month. As might be expected, larger firms spent more and smaller firms spent less. (Refer back to Exhibit III-2.)
- Over 84% of the service users were payroll customers, and about 46% were accounting application customers, as shown in Exhibits III-4 and III-5.
- The average growth reported was 1.9% per year, as shown in Exhibit III-6.
- Exhibit III-7 illustrates the decline of the pure batch market on a year-by-year basis. The growth rate of 7.9% is based on the expected internal growth of 1.9% and an estimated new account growth rate of 6%.
- However, in addition to this, an estimated account loss rate of 10% would yield a net annual loss rate of 2.1%, unadjusted for inflation.

EXHIBIT III-3

AVERAGE NUMBER OF EMPLOYEES IN COMPANIES SURVEYED

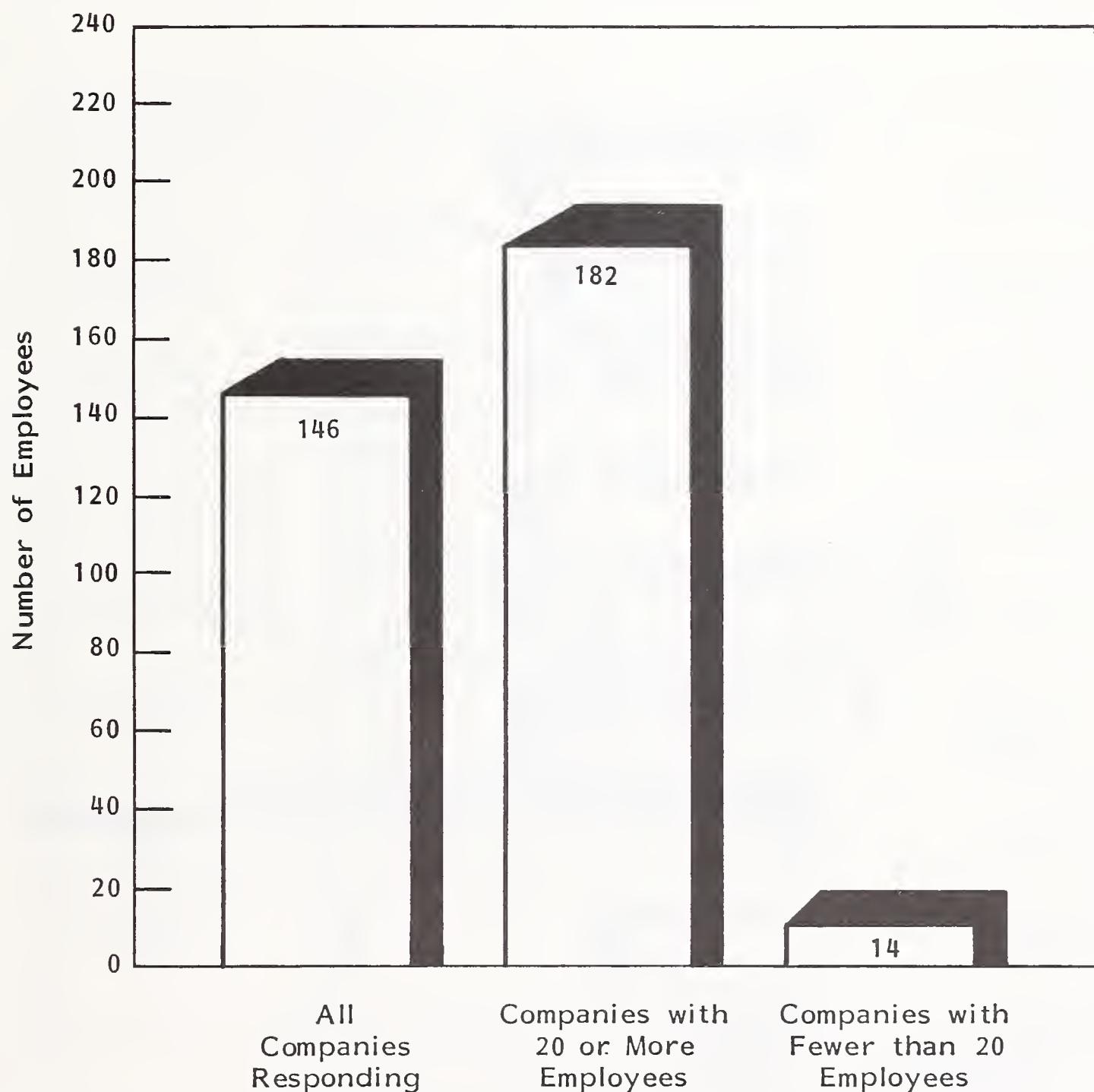
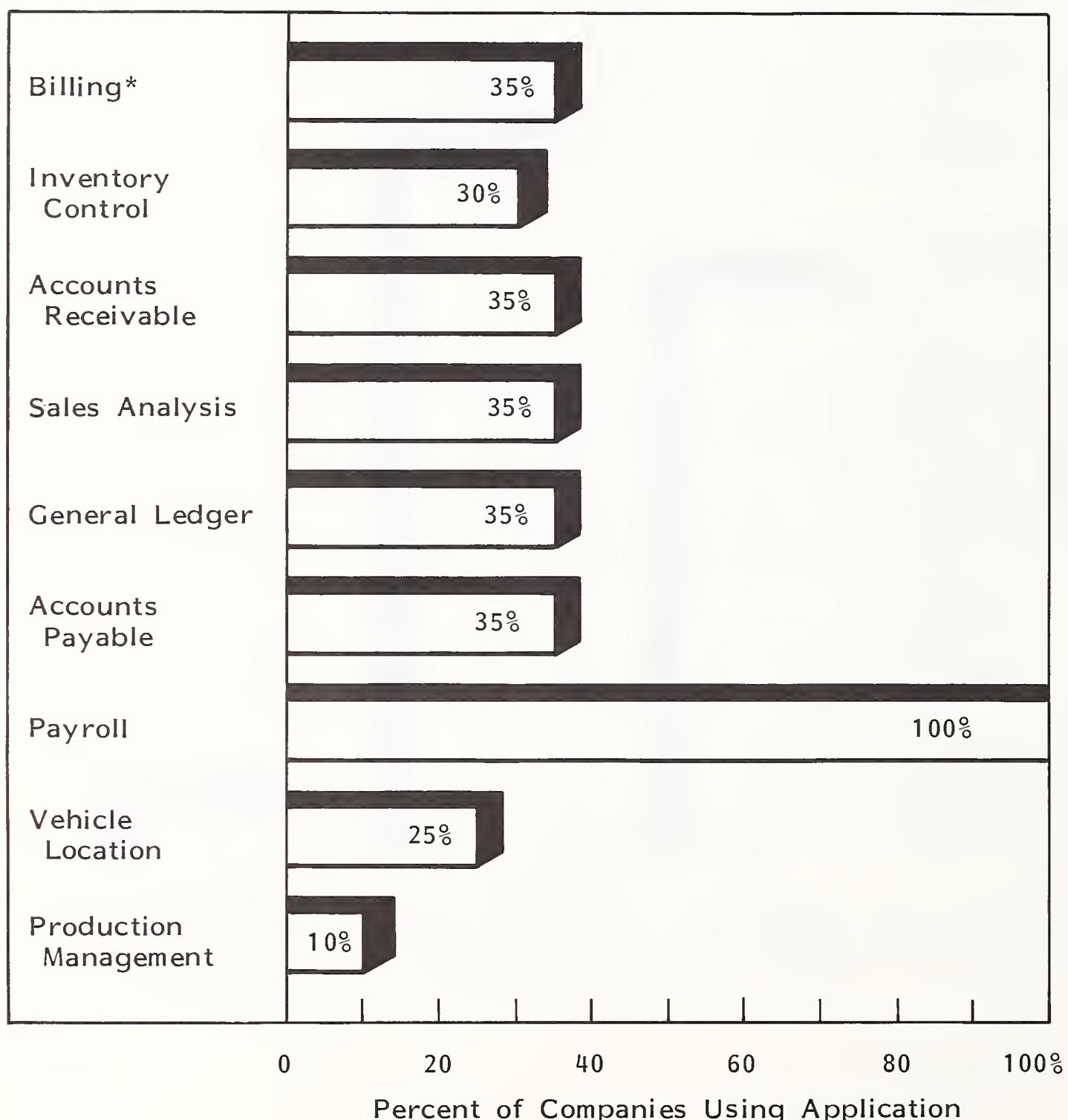


EXHIBIT III-4

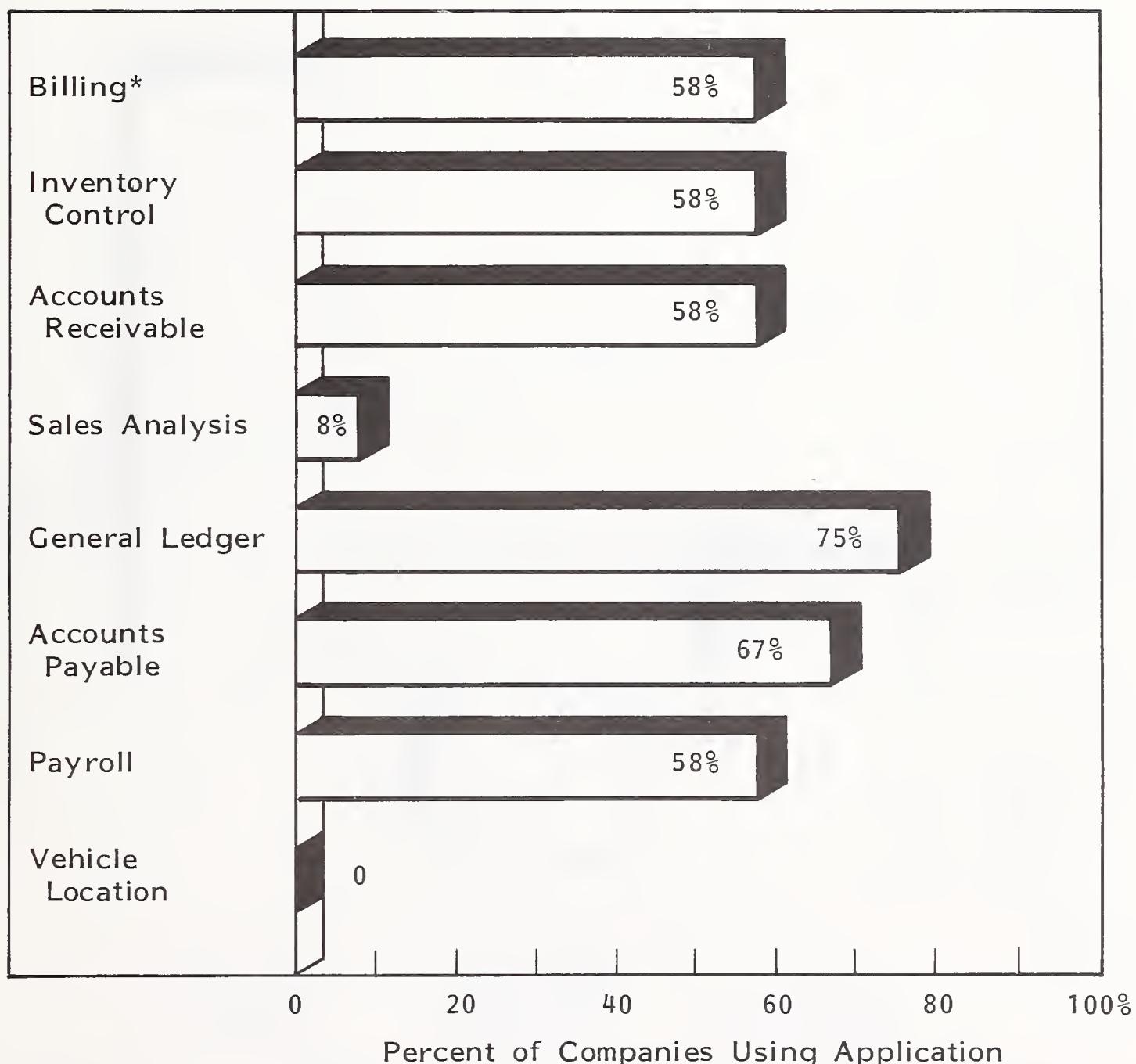
APPLICATION USE AS A PERCENT OF TOTAL
USE OF OUTSIDE SERVICE
(20 or More Employees)



* Includes Order Entry

EXHIBIT III-5

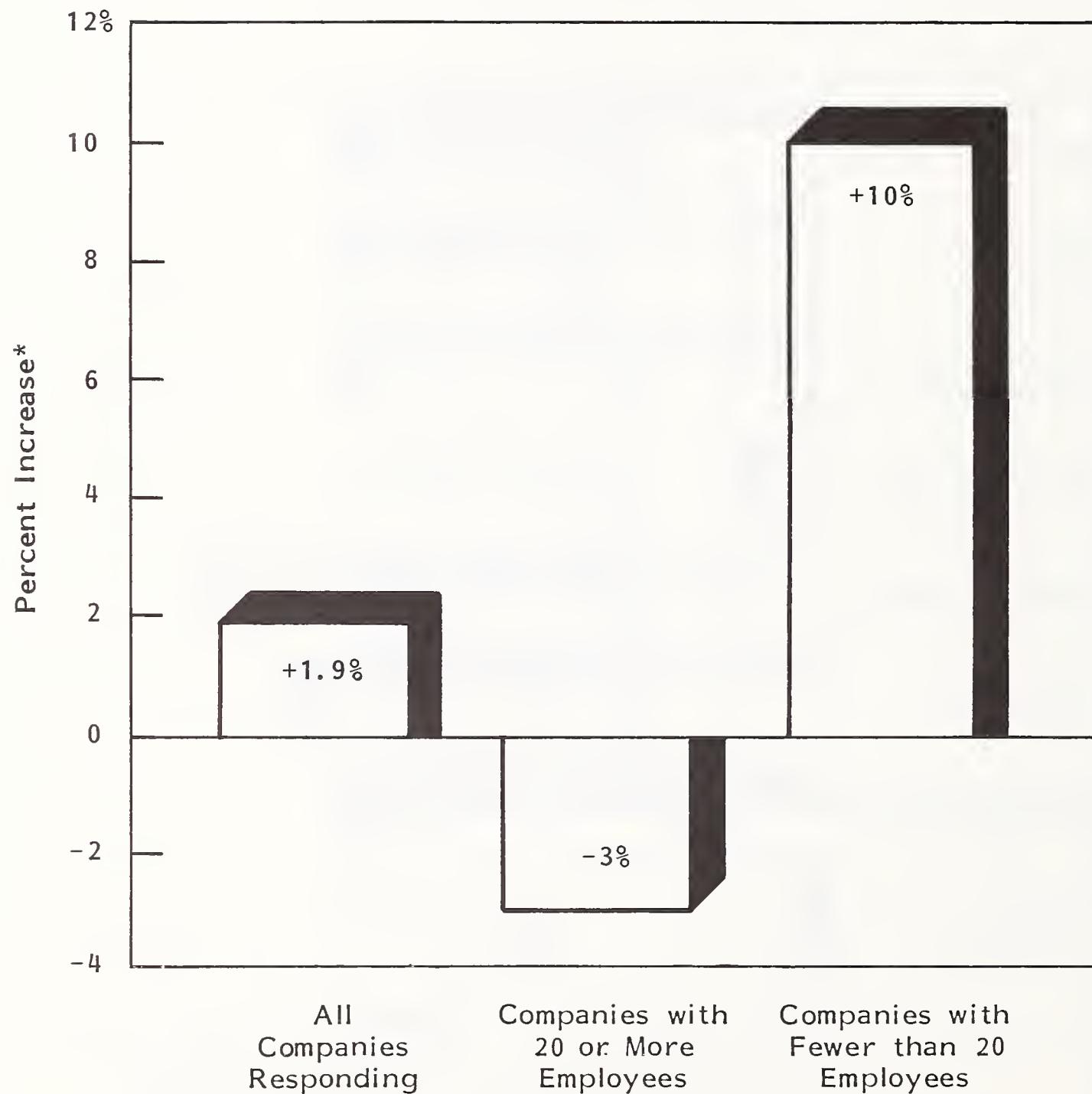
APPLICATION USE AS A PERCENT OF TOTAL USE OF OUTSIDE SERVICE (Fewer than 20 Employees)



* Includes Order Entry

EXHIBIT III-6

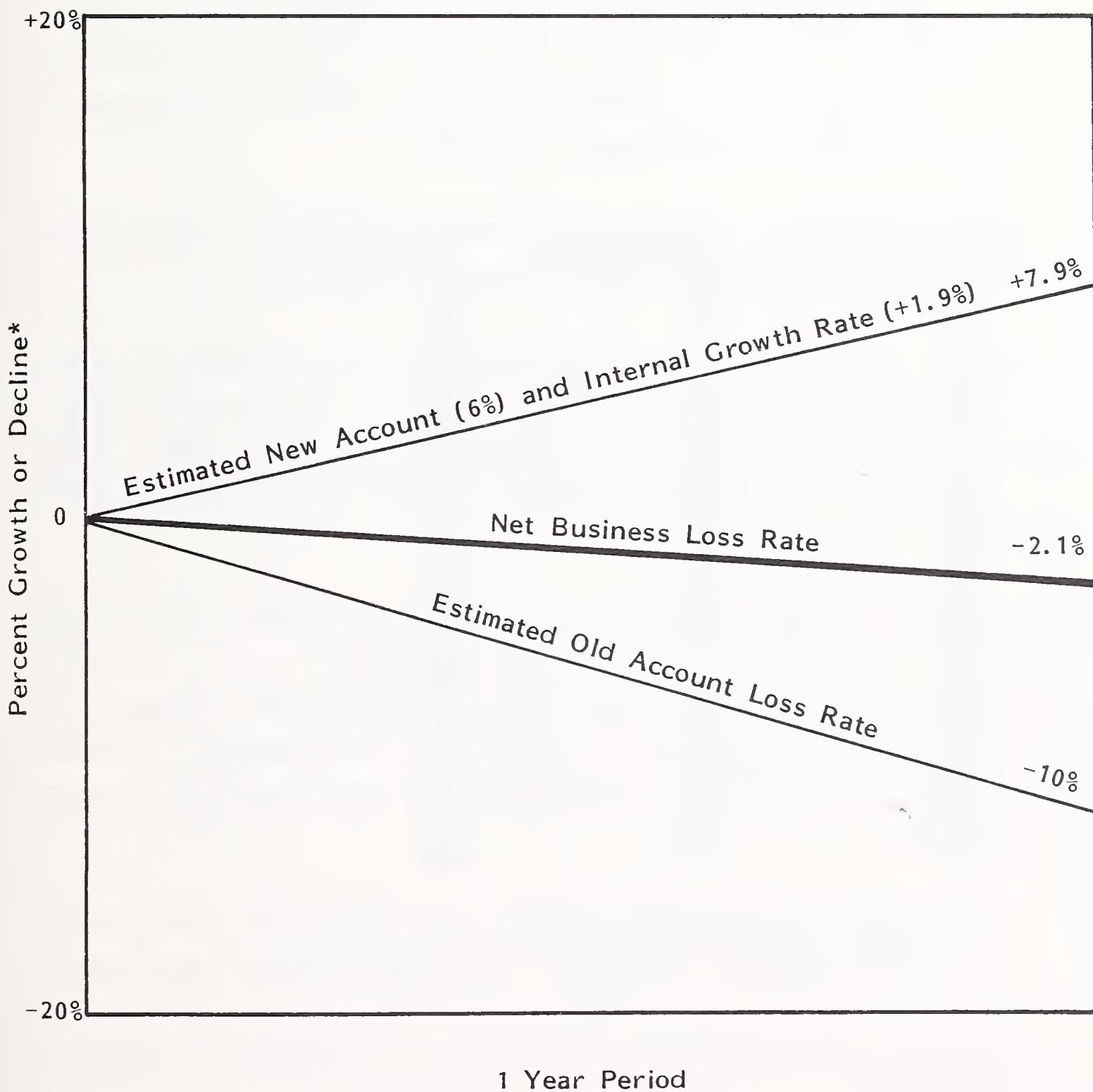
EXPECTED INCREASE IN THE USE OF OUTSIDE SERVICE ANNUALLY FOR NEXT FIVE YEARS



* Percentages reflect estimates based on current (noninflationary) dollars.

EXHIBIT III-7

ESTIMATED INDUSTRY GROWTH RATE FOR
PURE BATCH SERVICES



*Percentages reflect estimates based on current (noninflationary) dollars.

- Exhibit III-8 shows that 42% of all respondents intend, at some time, to replace outside computer service with their own systems.
 - The corollary shows that 58% do not intend to abandon outside services.
 - Of those intending to replace the service, the average time until replacement is two years, as shown in Exhibit III-9. Since the respondents were thinking in terms of when they would be likely to procure a replacement system, as opposed to when it would be fully operational, the reality is probably closer to 2.5 years.
- Exhibit III-10 shows an analysis for all respondents of the type of system to be chosen when service users purchase or lease an in-house system.
- Around one-third would select a single microcomputer or personal computer, and a further 14% would need a multiple PC solution. A multiterminal system (mini based) accounted for a further 36% of the sample group. The remaining 14% were aiming to use excess capacity on a system procured for some other purpose.
- The average respondent expects to spend a total of \$36,000 for a system, as shown in Exhibit III-11. The fact that respondents were able to readily produce expected expenditure levels for an in-house system indicated that most respondents had probably been approached by sales people or have had discussions with associates in similar businesses to gain some insight into the likely costs.
- It is interesting to note that the average service user spends \$712 per month on service but expects to purchase a system that is likely to cost around \$1,000 per month to lease. It is highly likely that the justification for this discrepancy is that the buyers will put other new applications on their in-house systems.

EXHIBIT III-8

PERCENT OF COMPANIES EXPECTING TO
PURCHASE/LEASE IN-HOUSE SYSTEMS

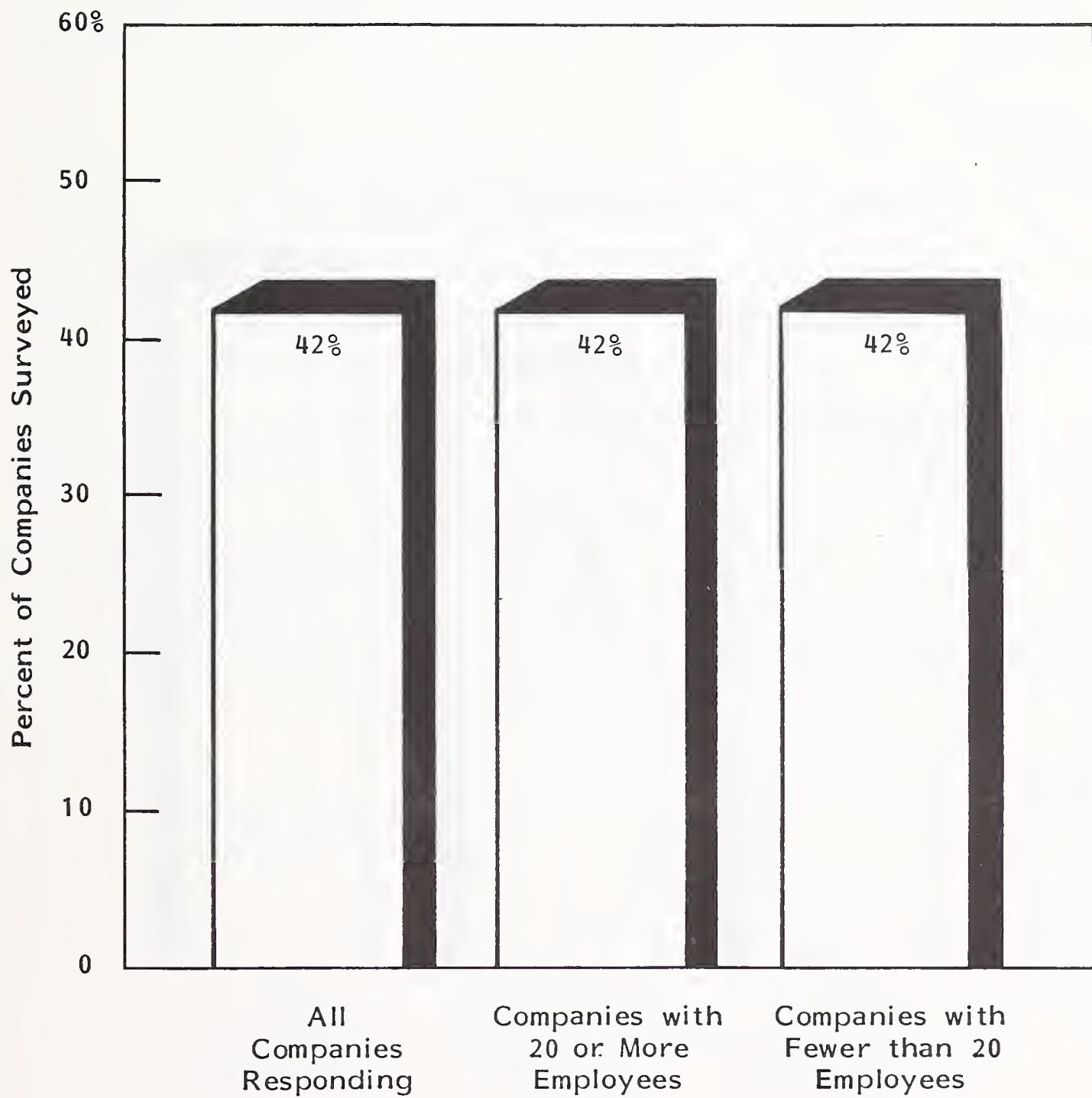


EXHIBIT III-9

WHEN WILL COMPANIES THAT EXPECT TO
PURCHASE/LEASE IN-HOUSE SYSTEMS DO SO?

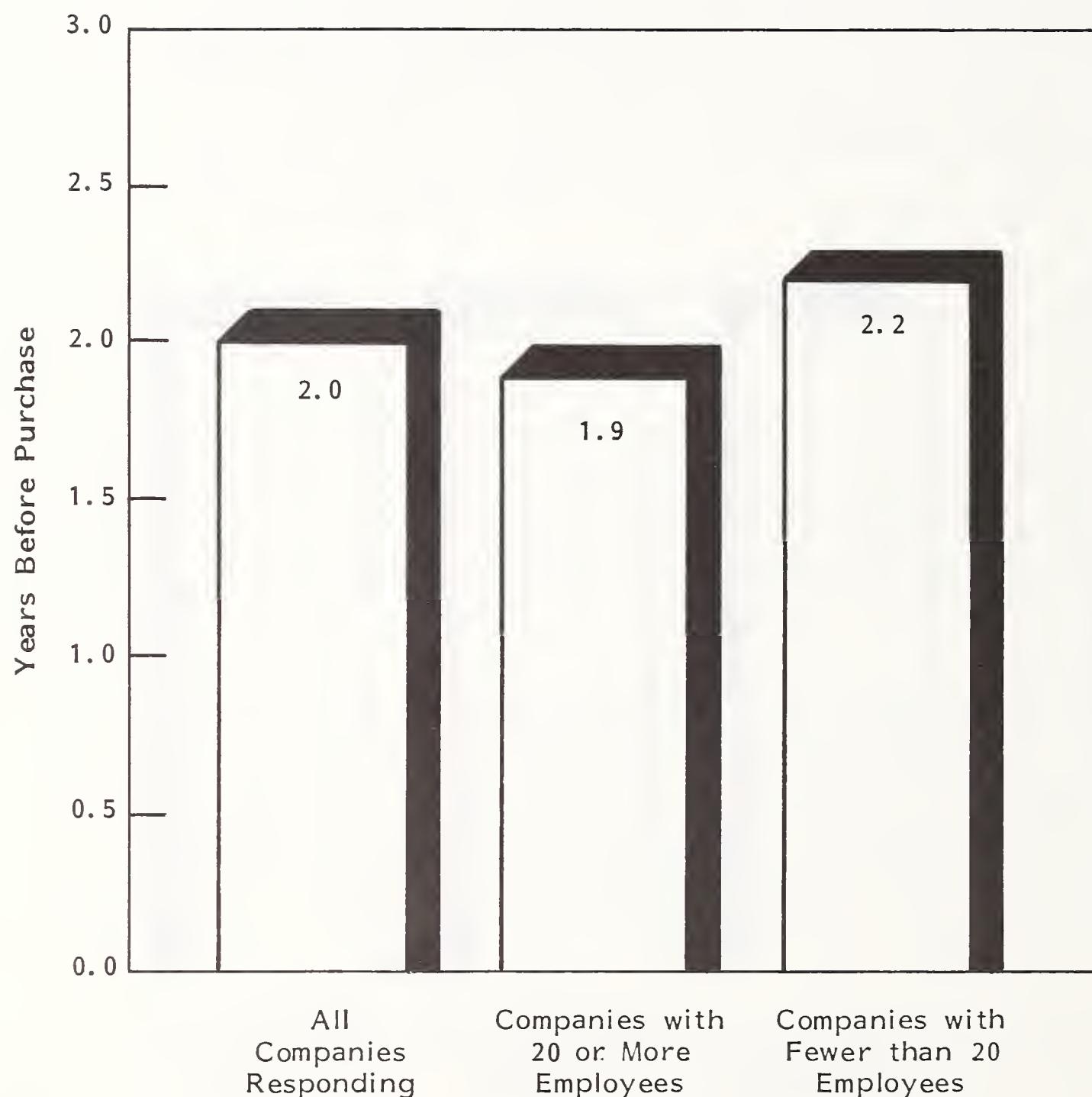


EXHIBIT III-10

TYPE OF SYSTEM TO BE CHOSEN WHEN
SERVICE USERS PURCHASE/LEASE IN-HOUSE SYSTEMS

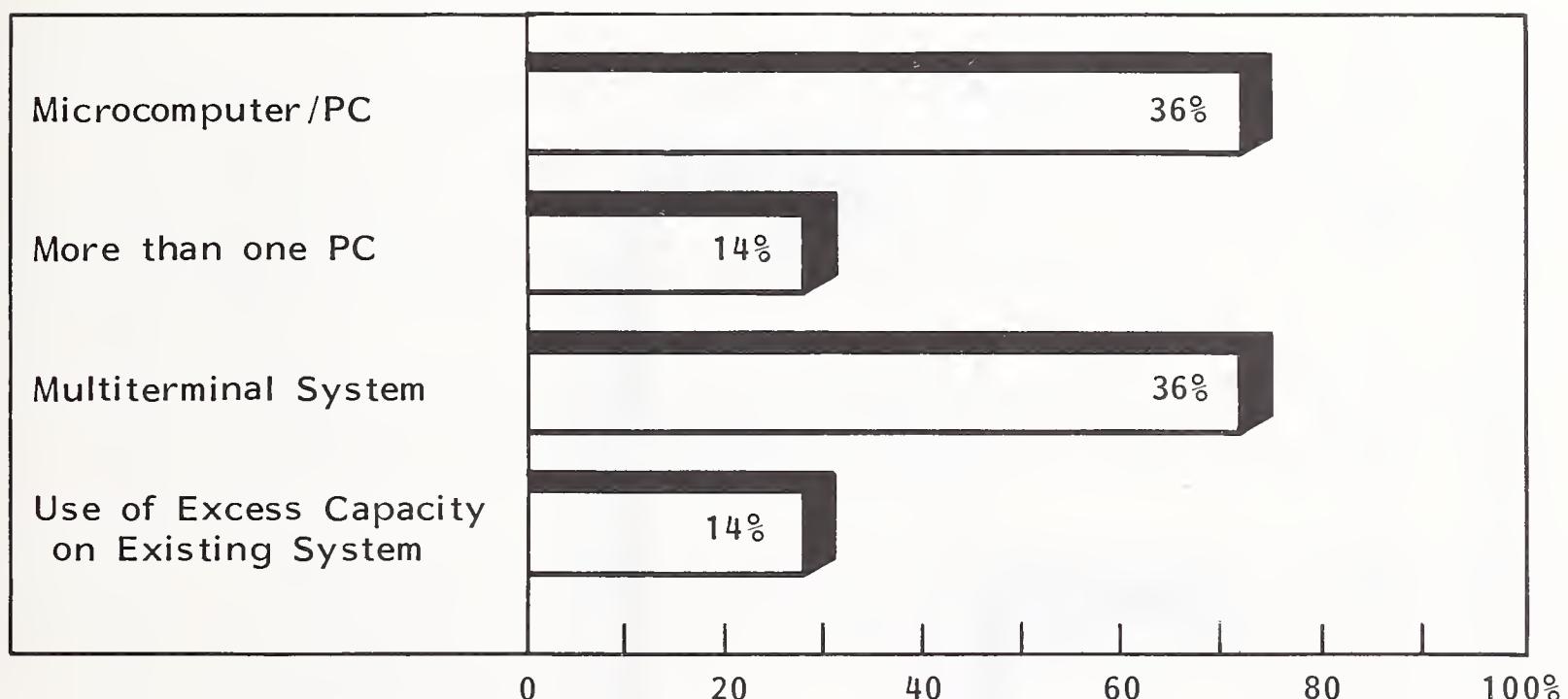
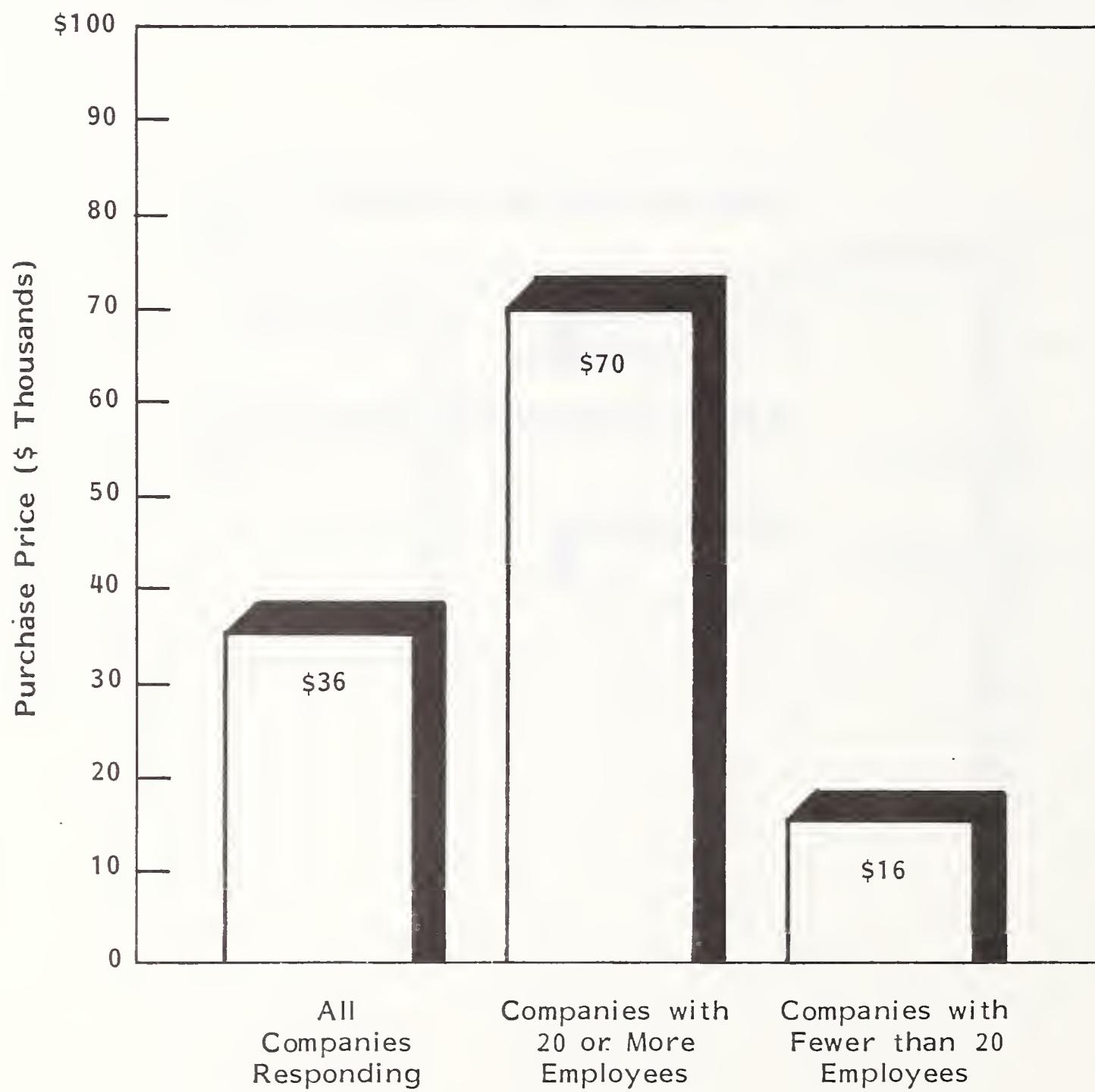


EXHIBIT III-11

WHAT WILL BE THE AVERAGE PURCHASE PRICE FOR
NEW IN-HOUSE SYSTEMS (WHETHER PURCHASED OR LEASED)?



- The question regarding target applications for the new system became (due to the preponderance of payroll users) a question of who would convert payroll to in-house systems. Twenty-seven percent of those who intend to buy computers would also do their payroll on the new system, as shown in Exhibit III-12.
- Another view of the same question shows that only 13% of all respondents, including those who did not intend to buy computers, expect to migrate away from payroll service in the next five years.
- The following question was asked of all respondents, whether or not they intended to buy a system: "Would you replace the existing computer services with your own computer if this was possible?" The results show a potential threat as well as a potential opportunity to service vendors.
 - Thirty-one percent of all service respondents, as shown in Exhibit III-13, would duplicate their process in-house if they could.
 - Moreover, 61% of service customers who are future computer buyers would duplicate the service offering when they buy a new system, as Exhibit III-14 depicts.
 - This would strongly support arguments that service companies should find ways to offer software, hardware, and integrated systems to their maturing customers--especially when viewed in the light of the increased expenditures expected by the buyers of in-house systems.
- The most frequent response (50% of all respondents) to the free-form question, 'Why did you start using a service in the first place?' was 'Security of information'. The next most frequent response (30%) was 'confidentiality'. The least frequent responses were 'vendor support' (10%), 'availability of software' (10%), and 'hardware capacity' (10%). Exhibit III-15 displays these percentages. (Multiple responses allow more than 100% total.)

EXHIBIT III-12

PERCENT OF COMPUTER BUYERS WHO INTEND TO
CONVERT PAYROLL TO NEW SYSTEM

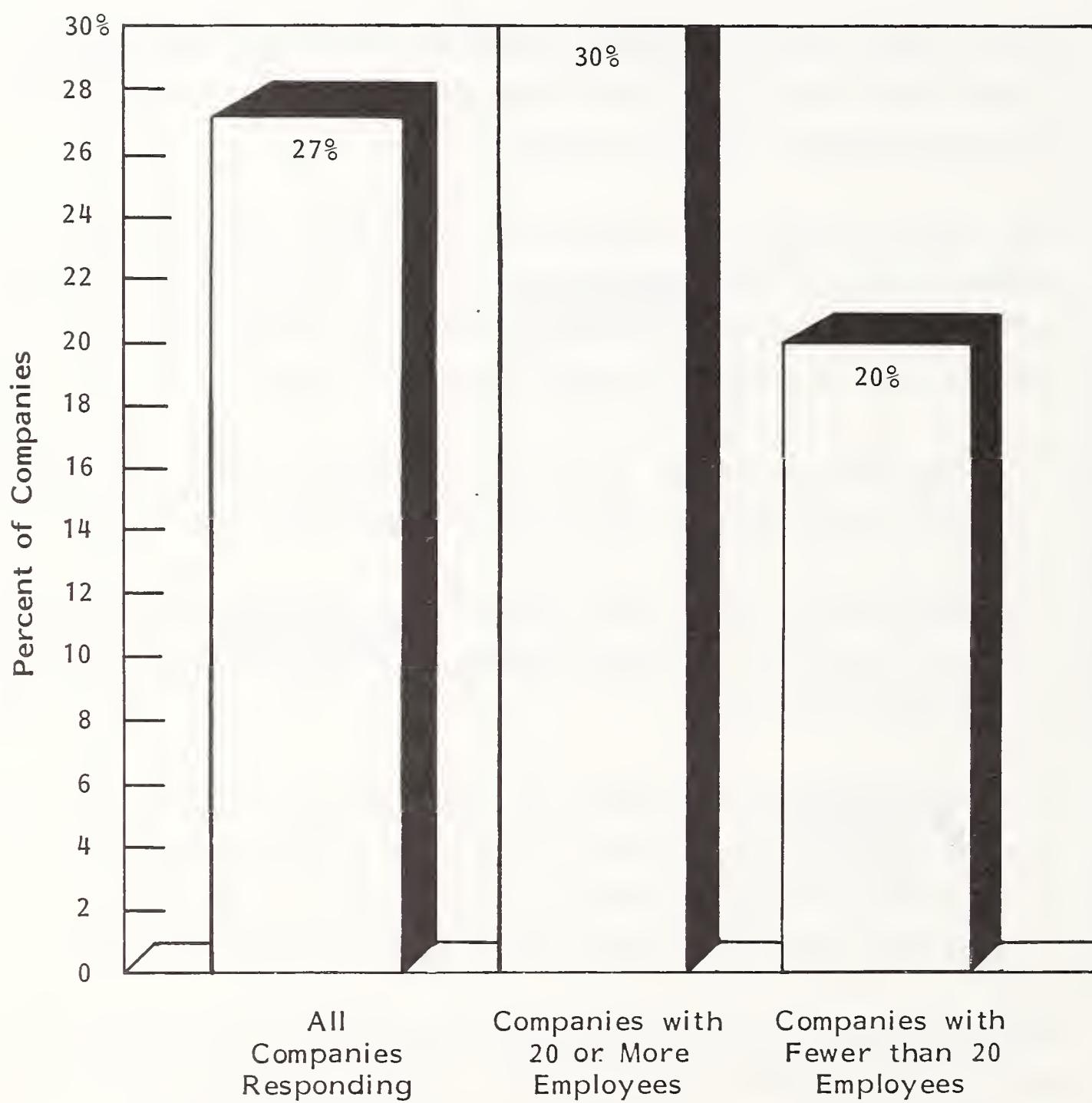


EXHIBIT III-13

PERCENT OF SERVICE USERS WHO WOULD USE
PRESENT METHODS IF OFFERED ON IN-HOUSE SYSTEM

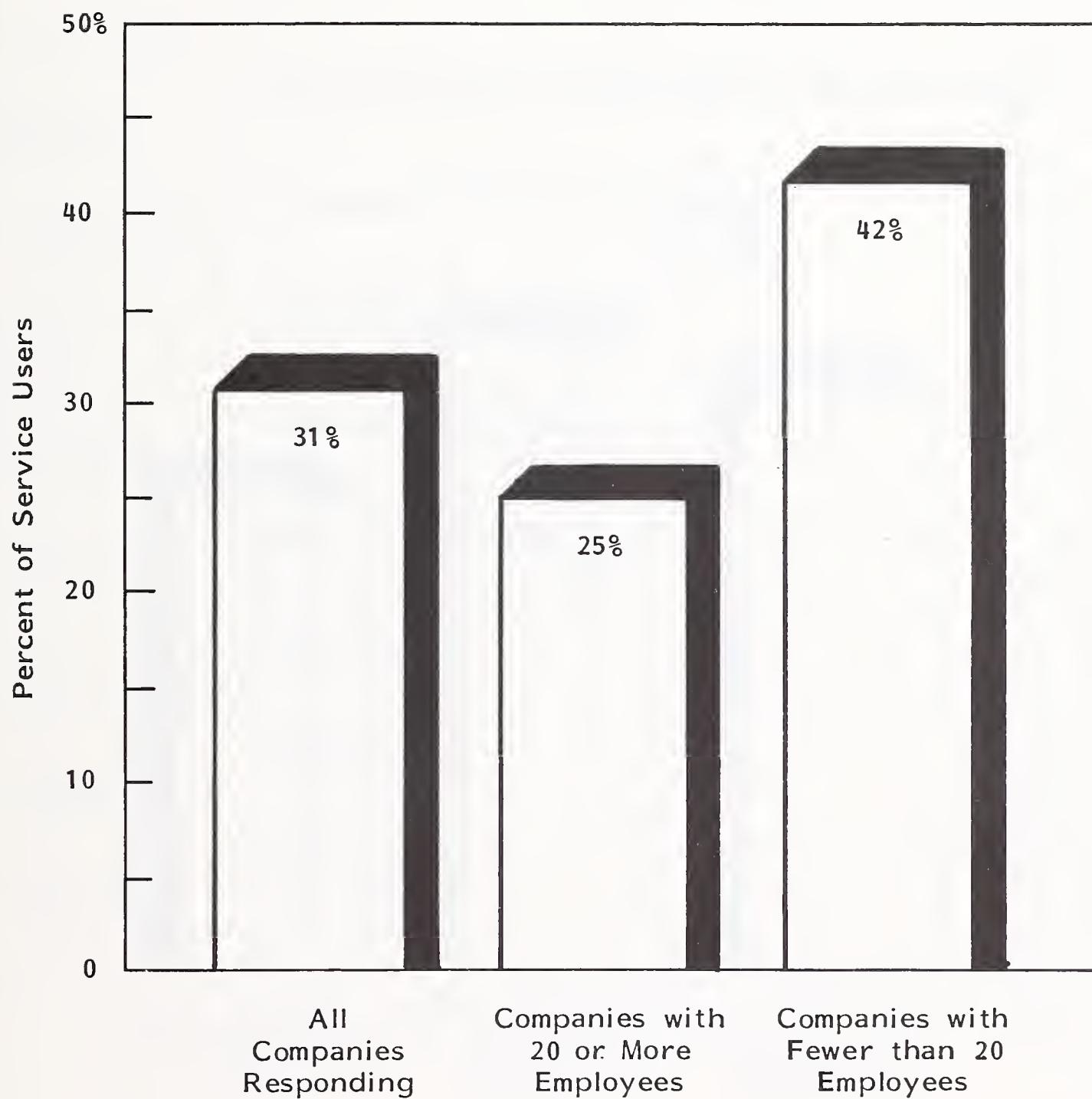


EXHIBIT III-14

PERCENT OF FUTURE COMPUTER BUYERS WHO WOULD USE
PRESENT METHODS IF OFFERED ON IN-HOUSE SYSTEM

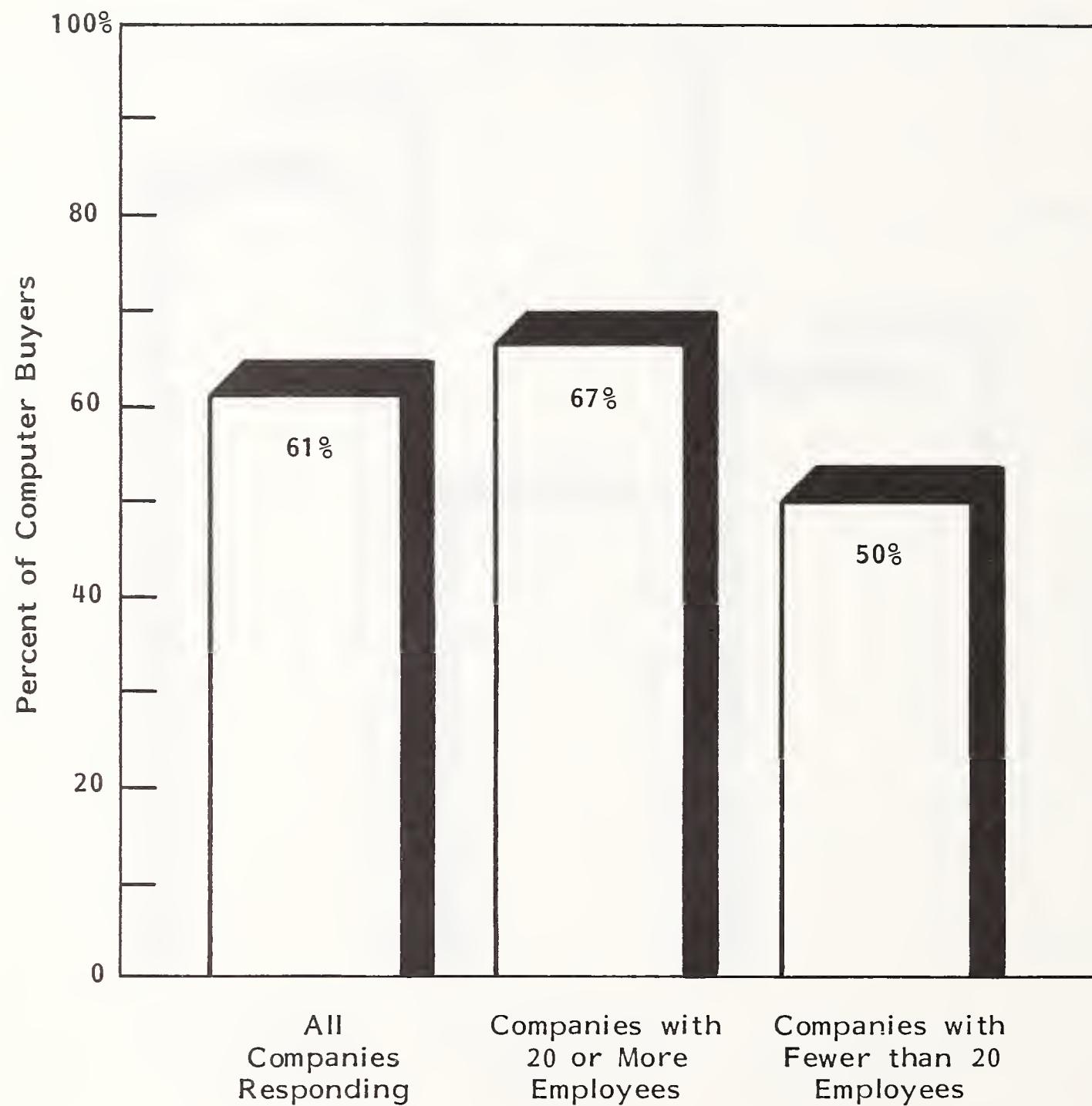
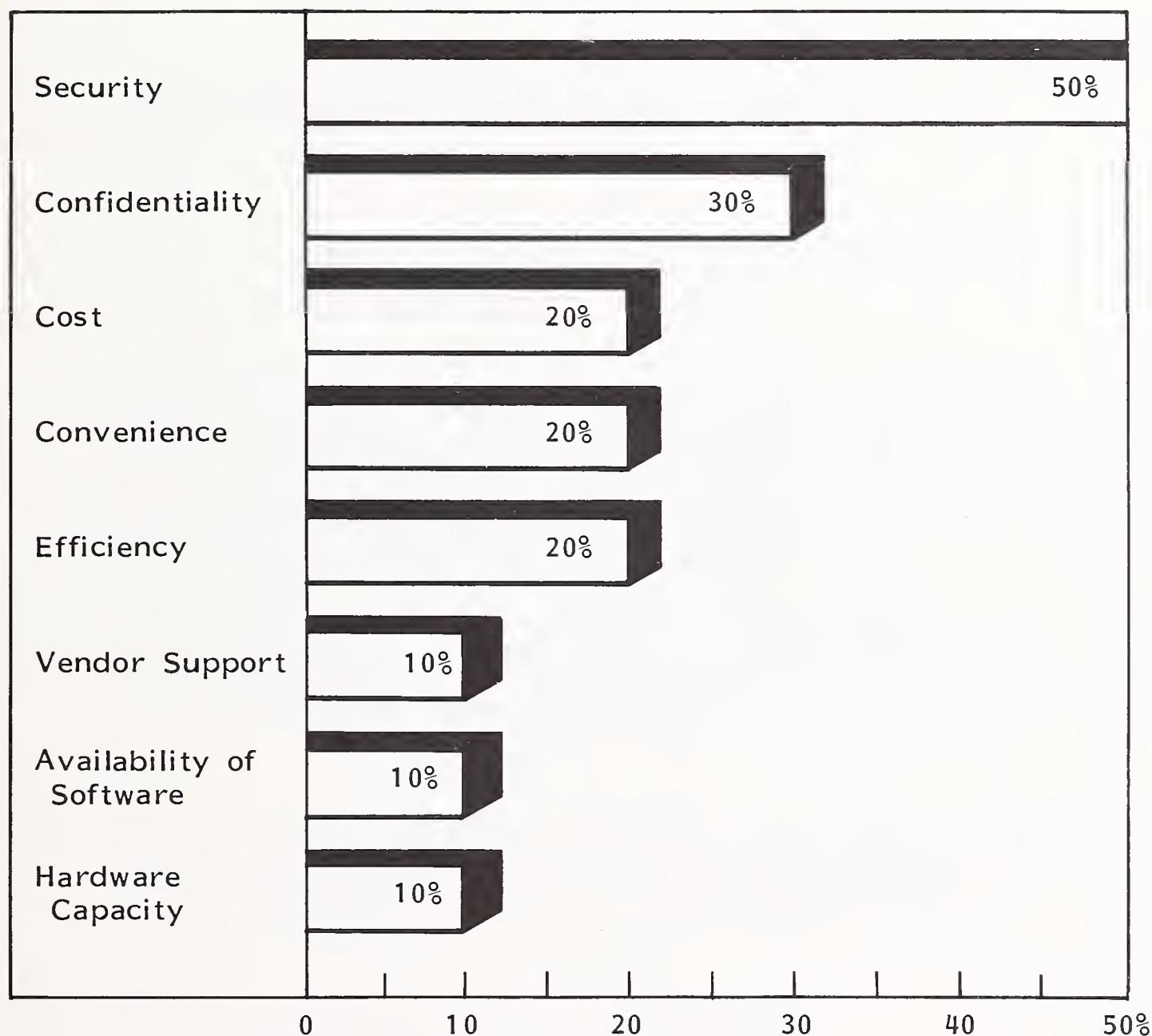


EXHIBIT III-15

REASONS THAT SERVICE USERS
BEGAN USING SERVICE WHEN FIRST INITIATED



- The high incidence of security and confidentiality reveals the strong bias of payroll services amongst this class of user.
- These results also tend to corroborate the advertised value of service offerings when compared to in-house systems. That is, if you can save time, trouble, and money, why do it yourself?

IV ANALYSIS OF KEY APPLICATIONS

A. APPLICATIONS KEY TO VERY SMALL COMPANIES

- Companies with fewer than 20 employees that use batch services reported 58% usage of payroll services.
- This group also extensively uses general ledger (75%) and other accounting services (refer back to Exhibit III-5). Many companies of this size may, however, be unaware that they are using computer services when their accounting firms supply them with periodic data.
- Only 8% of this group plans to go in-house with their payroll at any time in the near future, even though 40% plan to purchase computers within three years.
- The average expenditure per month for the very small user is \$516 per month, or \$37 per employee per month (refer back to Exhibit III-2).

B. APPLICATIONS KEY TO SMALL COMPANIES

- The larger firms are the most dedicated users of payroll, with 100% of the service customers indicating usage. These firms also indicated approximately

35% use of other applications, with the majority being accounting services. However, this group was more inclined to take their applications in-house, with 51% planning to purchase computers within two years and 8% planning to implement payroll when they do so.

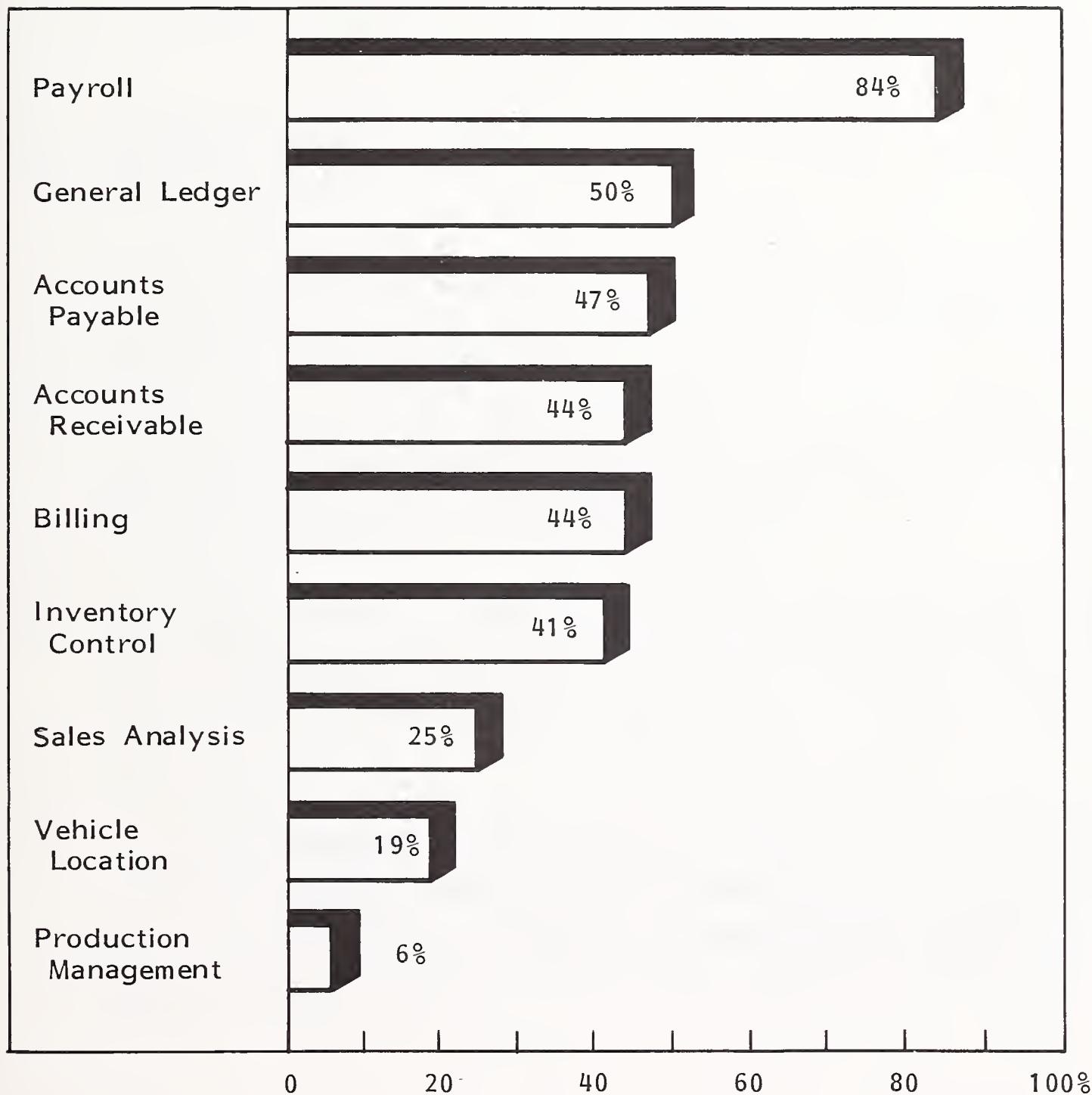
- It is important to note that these firms all intend to bring their accounting functions in-house if they buy computers (excluding payroll).
- The larger firms spend \$753 per month on services, for an average of \$4.1 per month per employee (refer back to Exhibit III-2).

C. KEY APPLICATIONS

- Exhibit IV-1 shows the ranking of the key outside service applications as a function of total usage for services users.
- The overwhelming lead of payroll suggests the position of this application as more 'solid' for the batch vendor, but also suggests the already serious erosion of the accounting functions as they continue to migrate to in-house operation.

EXHIBIT IV-1

RANKING OF KEY APPLICATIONS ON
OUTSIDE BATCH SERVICE



V THE MICRO THREAT TO BATCH SERVICE VENDORS

A. EXPECTED ANNUAL CHANGE

- The total small business market for batch services is expected to decrease by an estimated 2.1% per year in current dollars. (Refer to Exhibit III-7.)
- Based on previously discussed survey findings, the erosion of the small business market for batch services is not likely to get worse in the near future. This will allow batch service vendors time to react.
- Some batch business will change from pure batch to on-line batch utilising PCs or terminals in user facilities and frequently utilising the same supplier, when the batch vendors upgrade their systems to provide this additional capability.
- It is estimated that about 17% of the service delivered to the small organisation by the traditional batch vendor is currently delivered as some form of remote operation (remote batch, local processing on-line batch, etc.). This portion is expected to grow at 15% per annum (refer back to Exhibit II-3).

B. LIKELY REPLACEMENT SYSTEMS

- Very small firms will probably select PC devices with a very simple software 'set' for accounting functions (including inventory control).
- Many systems will be purchased at retail stores, and the purchaser will experience difficulty in installing and operating the system for two to three months.
- The software 'set' will most likely be 'integrated'--i.e., the accounts payable and accounts receivable will interact automatically with the general ledger, etc.
- Many users will discover that no one is interested in their problems after they have bought the systems, and the systems will not do exactly what the users thought they would.
- Once the system is operational, the user will become increasingly dependent on it; when the system has a major malfunction, it will seriously impact the user's income.
- The user will learn from this experience and will reach agreement with another user to back up the system. But there will be enough incompatibility to make this first experience at backup use futile.
- Users will realise that they are completely on their own and that the only true backup is a redundant system--an alternative that is too expensive. They will finally decide to risk failure with no alternative.
- The larger companies will purchase a multiterminal system that may be based on an extended PC or a very small minicomputer.

- The system will most likely be purchased from an OEM vendor that will assist the user to some degree with installation and operation.
- The software will be written and supplied by the OEM vendor as a value-added package.
- The vendor will find a backup alternative. But time, distance, and incompatibility will keep the user from implementing it.
- In all cases, it is likely that the user will hire a consultant or a full-time systems assistant whom the user will not expect to retain at additional cost beyond original expectations.

C. REPLACEMENT SYSTEMS COSTS

- The firm with fewer than 20 employees expects to spend an estimated \$16,000, or \$500 per month, for an in-house system.
- The larger firms expect to spend approximately \$70,000, or almost \$2,000 per month, for a system.
- With the exception of the probable personnel costs that may accrue in order to make the system operational in the beginning, the expected expenditures are considered reasonable.

D. THE ADP APPROACH

- To illustrate potential approaches to the problems of the micro threat to small business service users, the following details of Automatic Data Processing's (ADP) product offerings in this area in the U.S. are included.

- ADP has for several years studied the problem of migration from traditional batch to in-house systems as part of ADP's on-going strategy. It must be assumed, as the company continues to grow and show profit, that these strategies are well thought out, even if all of their attempts have not been successful.
- ADP continues to offer extensive tax services along with the payroll offering, which relieves the customer from the burden of reporting and even assumes the late reporting penalties in many cases.
- By assuming the responsibility for the tax consequences of its larger customers, ADP not only assures continued loyalty but gains additional income by stretching the tax payment time to the maximum, assuring maximum use of its customer's money.
- Many service bureaus, ADP included, have for years provided methods by which batch customers could go on-line to large processors, thus satisfying some of the requirements of going in-house by providing terminals on the customer site.
- A recent announcement by ADP carries this philosophy a step further by providing batch service customers with an in-house system--to which ADP is on-line.
- The system, the ADP 586, costs \$1,200 per month including hardware, software, and normal service. It is based on an Altos processor and comes with software similar to the ADP batch offering. The system has full communications with ADP, so training, support, and troubleshooting are all provided by ADP at the customer site.
- The system is not a 'distributed data processing system' that allows the customer's intelligent terminal to do some processing locally in conjunction

with processing on ADP's host. Rather, it is a fully automated local processor to which ADP maintains contact for maximum customer comfort and probable long-term loyalty.

- By taking this approach, ADP is showing recognition of all the attendant problems faced by migrating batch customers. In addition, it helps customers in an orderly transition to full local processing and at the same time retains them as ADP customers by maintaining contact for service and support. Customers will know that they are always in contact with suppliers via their systems.
- Most other smaller batch service operators in the U.S. are offering, or planning to offer, some form of on-line activity that closely complements their present batch offering, but ADP's venture appears to be fairly unique and aggressive.

VI FUTURE APPROACHES FOR BATCH SERVICE VENDORS

A. SOFTWARE

- Vendors should prepare to be able to offer their software in a form as close as possible to their present batch service offerings.
- The software offering should be clearly documented and attractively packaged, and the vendors should provide updates in order to maintain some customer control.
- Software should be priced at a high premium, due to the extra value to the potential user of maximum simplicity in conversion from a familiar system.
- Software should be offered only to existing clients, and only if there are no other alternatives.

B. ON-LINE PCs

- At a minimum, vendors should prepare to offer the batch service on-line and have the client perform certain limited local processing such as data preparation, error checking, and cheque printing.

- Vendors should package the system so the customer buys the entire capability from the vendor, including the PC, the software, the communications link, training, and troubleshooting.
- Vendors should offer reliable PCs from extremely stable hardware firms, such as IBM.

C. INTEGRATED SYSTEMS

- The most likely successor to a batch bureau service is an integrated system operating entirely at the client's site, with continued vendor relationships for service and support.
- Such a system should be marketed as the vendor's product relocated at the client's site, and as an adjunct to the vendor's existing service offering for an ongoing monthly fee.
- Advertising and promotion should be carefully worded so as not to change the concept of vendor support, as well as continued ease of use and time savings, that originally prompted the use of a batch service.

VII CONCLUSIONS AND RECOMMENDATIONS

A. MARKET DIRECTION AND CHANGE

- With a few exceptions the traditional batch service world has changed significantly within the past three years, with most small firms having moved at least some processing in-house.
- Payroll continues to be a strong service market, and some general accounting use is still available to service users.
- It is becoming rarer to find an organisation having more than 20 employees not using some form of computer, usually justified by a specialised industry-specific use such as numerical control or by bread-and-butter applications such as accounts receivable.
- An estimated 17% of batch business has migrated from pure batch to a combination of a terminal or micro on-line to a mainframe, usually with the same service supplier. This segment will grow at an estimated annual rate of 15%.
- Batch service centres should offer a form of remote computing service to their customer base in order to grow and forestall migration to in-house systems.

B. COMPARATIVE APPROACHES

- The possible approaches facing the pure batch vendor today are as follows:
 - Do nothing.
 - Sell the business.
 - Reduce costs and maximise profits.
 - Grow through merger/acquisition ('end game' strategy).
 - Modify the offering to accommodate the customer's desire to own a computer.
 - Enter the in-house integrated systems computer market and compete with existing offerings.
- Doing nothing could be an attractive option, but since the net effect is an actual loss of business when inflation is taken into account, a long-term reduction in marketing costs should be considered.
- Doing nothing should be considered only by the small organisation that has close control over the operation and is satisfied to go nowhere.
- Selling the business has become increasingly attractive, especially for the small closely held service centre that sells to the larger competitor. In situations in which the number of buyers has diminished, there are still some service organisations (ADP is among them) that wish to grow through acquisition. CMG's absorption of BARIC's batch processing business is a case in point.

- Reducing costs and increasing profits has become a possibility for the larger supplier that chooses to make the service centre operation a 'cash cow' to finance another business venture.
 - The usual cost reductions come in severely reduced marketing and systems upgrades.
 - Although this is the most painless way to reduce costs, it increases the likelihood of accelerating the loss curve, which should be as gradual as possible.
- Growth through acquisition is attractive to the large service vendor, but it is usually coupled with some form of strategic change, such as the approaches listed below.
- Modifying the system to accommodate the customer's desire to have an in-house computer has become attractive to many service vendors. Modest success is represented by merely placing a terminal in the user location and replacing the vendor delivery service; greater success is represented by allowing the user some form of local processing and control.
- Where a service firm establishes a new sales group to sell standalone systems that directly compete with its service offerings, it must aim to not only obtain conversion sales from its own clientele but must mount an aggressive campaign to sell new clients as well.

C. RECOMMENDATIONS

- The most practical approach to the changing market scenario is to combine the existing service offering with some method of on-line operation.

- The resultant offering should be as compatible as possible with the existing offering to maximise client comfort in making the switch, if and when this happens.
- The service vendor should mount an aggressive campaign to existing customers, emphasising the positive aspects of service and reinforcing the original reasons for selecting service--i.e., saving time, effort, and money.
- The service alternative to in-house data processing continues as a viable method of delivery within a narrowing envelope of clients. However, with the appropriate strategy and attendant investment for the future, outside services for data processing solutions by batch vendors can continue to be a growth business.

EXHIBIT A-1

FIVE-YEAR FORECAST, 1985-1990
INFORMATION SERVICES FOR SMALL ORGANISATIONS
(France, Italy, United Kingdom and West Germany)
(\$ Millions)

SERVICE DELIVERY SECTOR	1985 (\$ Millions)	AAGR	1990 (\$ Millions)
Pure Batch Sales to Small Organisations	\$ 470	-2.1%	\$ 420
Batch Migration to Other Delivery Method	100	15.0	200
Total Service to Small Organisations	570	+1.7	620
Total Batch Forecast	1,145	+1.0	1,200

N.B. For more background, refer to INPUT's 1984 analysis and forecasts for the information services industry.

EXHIBIT A-2

CURRENCY CONVERSION RATE ASSUMPTIONS

CURRENCY	U.S. DOLLAR CONVERSION RATE ASSUMPTIONS*	
	1985	1990
French Francs	9.4	11.4
Italian Lira	1923	2446
Pounds Sterling	0.79	0.79
Deutsche Marks	2.9	2.6

* Conversion rate is estimated on the basis of prevailing exchange rates. It is used simply as an index to eradicate distortions that would arise as a result of the use of different inflation assumptions for different countries.

APPENDIX B

SERVICE VERSUS SYSTEMS IN EUROPEAN ORGANISATIONS

NAME: _____

POSITION: _____

ADDRESS: _____

Tel. No.: _____

What is your company's main field of activity? _____

1. Which of the following categories best describes your firm in number of employees?

- Less than 20 Employees
 20 to 500 Employees
 More than 500 Employees

2. Do you ever use an outside service for such applications as payroll or any other uses?

Yes No

If Yes, how long have you used this service? _____ years

If No, have you ever used the service in the past? What is your present in-house system?

3. Which of the following best describes the average monthly expenditure for the service?

- Less than £150
 £150 to £750
 £750 to £1200
 More than £1200

4. Which of the following applications are performed by your service?

- | | |
|--|--|
| <input type="checkbox"/> Billing | <input type="checkbox"/> General Ledger |
| <input type="checkbox"/> Inventory Control | <input type="checkbox"/> Accounts Payable |
| <input type="checkbox"/> Accounts Receivable | <input type="checkbox"/> Payroll/Human Resources |
| <input type="checkbox"/> Sales Analysis | <input type="checkbox"/> Other |

5. Which of these applications is the most critical to your business?

6. To what extent do you expect your use of the service to grow on an annual basis? _____ % (+ or -)

7. Do you ever plan to replace your service with your own computer?

_____ Yes _____ No _____ If yes: _____ Within 1 Year

8. What kind of computer would replace your service?

_____ A microcomputer such as an IBM PC
_____ More than one PC
_____ Something on a larger scale, such as a multiterminal system
_____ Excess capacity on a computer you are already using for something else
_____ Other _____

9. Which of the following best describes your anticipated computer investment, whether you buy or lease?

_____ Less than £15,000
_____ £15,000 to £75,000
_____ More than £75,000

10. Which application do you expect to automate first on your new system?

First _____
Second _____
Never _____

11. Would you replace the existing computer services with your own computer if this was possible?

_____ Yes _____ No

12. Why did you start using the service in the first place?

About INPUT

INPUT provides planning information, analysis, and recommendations to managers and executives in the information processing industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions. Continuing services are provided to users and vendors of computers, communications, and office products and services.

The company carries out continuous and in-depth research. Working closely with clients on important issues, INPUT's staff members analyze and interpret the research data, then develop recommendations and innovative ideas to meet clients' needs.

Clients receive reports, presentations, access to data on which analyses are based, and continuous consulting.

Many of INPUT's professional staff members have nearly 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed in 1974, INPUT has become a leading international planning services firm. Clients include over 100 of the world's largest and most technically advanced companies.

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